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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,476	01/27/2004	Koji Shimizu	118245	9140

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OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER

AMADIZ, RODNEY

ART UNIT	PAPER NUMBER
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2629

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/764,476

Applicant(s)

SHIMIZU ET AL.

Examiner

Rodney Amadiz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants Admitted Prior Art (herein referred to as "AAPA"—Pg. 1, ¶ 0002-0003) in view of Ahan (GB 2,325,329—herein referred to as "Ahan") and Watanabe et al. (U.S. Patent 5,534,809—herein referred to as "Watanabe").

As to **Claim 1**, AAPA teaches an electro-optical device, comprising: a plurality of scanning lines; a plurality of data lines; a plurality of pixels arranged corresponding to intersections between the scanning lines and the data lines to form a matrix (**AAPA—Pg. 1, ¶ 0002**).

AAPA fails to teach a plurality of signal-supplying lines having first ends that are arranged close together and second ends that are arranged close together; data-line selecting means having a plurality of selecting circuits, each selecting circuit supplying an image signal to one data line selected from a predetermined number of the data lines on the basis of a plurality of selection signals supplied through the plurality of signal-supplying lines; a plurality of input terminals provided at the first ends of the plurality of signal-supplying lines; and selection-signal supplying means to supply the plurality of selection signals from the first ends of the signal-supplying lines; each of the selecting

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circuits having a plurality of switching elements having first input-output terminals connected to the data lines, second input-output terminals to which the selection signals are supplied; and the plurality of the signal-supplying lines comprising wiring lines from the input terminals to the control input terminals; and the wiring lines having the same length and width.

Examiner cites Ahan to teach a plurality of signal-supplying lines having first ends that are arranged close together and second ends that are arranged close together (*Fig. 2, note lines coming out of SWS1, SWS2 and SWS3*); data-line selecting means having a plurality of selecting circuits (*Fig. 2, Reference Numbers 54 and DMP1, DMP2, DMP3, DMP4 and DMP800*) each selecting circuit supplying an image signal to one data line selected from a predetermined number of the data lines on the basis of a plurality of selection signals supplied through the plurality of signal-supplying lines (*Fig. 2, note Image signal outputted from Reference Number 52 and note data lines DL1-DL2400 and Pg. 9, lines 5-30*); a plurality of input terminals provided at the first ends of the plurality of signal-supplying lines (*Fig. 2, note input terminals of SWS1, SWS2 and SWS3*); and selection-signal supplying means to supply the plurality of selection signals from the first ends of the signal-supplying lines (*Fig. 2, note signals SWS1, SWS2 and SWS3—note that although not shown, it is inherent that these signals must come from a device*); each of the selecting circuits having a plurality of switching elements (*Fig. 2, Reference Number DMP1—note transistors and Pg. 9, lines 15-23*) and having first input-output terminals connected to the data lines (*Fig. 2, Reference Number DMP1 and data lines DL1, DL2 and DL3*

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and Pg. 9, lines 15-30), second input-output terminals connected to a node supplying the image signals (**Fig. 2, Reference Number DMP1 and 52**), and control input terminals to which the selection signals are supplied (**Pg. 9, lines 5-30**); and the plurality of the signal-supplying lines comprising wiring lines from the input terminals to the control input terminals (**Fig. 2—note wiring lines from the input terminals of SWS1, SWS2 and SWS3 to the control input terminals DMP1**). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to replace the generic data driver in the electro-optical device as taught by AAPA by the data driving sections 40 and 54 as taught by Ahan in the electro-optical device taught by AAPA so as to reduce the number of DAC and output amplifiers, reduce power loss and reduce the number of lead lines in the electro-optical device (**Ahan—Pg. 9, line 30—Pg. 10, line 15**).

Finally, AAPA, as modified by Ahan, fails to teach the wiring lines having the same length and width. Examiner cites Watanabe to teach that the concept of having wiring lines of the same length and width is well known (**Col. 6, lines 45-48**). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to incorporate the teachings of Watanabe (i.e. make the wiring lines with the same length and width) in the electro-optical device taught by AAPA and Ahan so that each wire line may be equal in load capacitance (**Col. 6, lines 45-48**).

As to **Claim 6**, AAPA as modified by Ahan teaches an electronic apparatus comprising the electro-optical device of Claim 1 (**AAPA—Pg. 1, ¶ 0002**).

Response to Arguments

3. Applicant's arguments with respect to claims 1 and 6 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney Amadiz whose telephone number is (571) 272-7762. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

R.A.
R.A.
1/19/07
Division 2629


SUMATI LEFKOWITZ
SUPERVISORY PATENT EXAMINER